

### 3.5 Lower Keys – Mile Marker 4 to 40

#### 3.4.1 Description

The Lower Keys tier region is comprised of all of the islands from Mile Marker 4 (Stock Island) to Mile Marker 40 (Little Duck Key), excluding Big Pine Key and No Name Key. This region includes refuge areas, residential neighborhoods and high-density commercial areas. CARL land and the Great White Heron Wildlife Refuge are included in the refuge areas. The high-density commercial areas are on Stock Island and US 1 corridor, especially Big Coppitt Key and Summerland Key. Boca Chica Naval Air Station and land that is specifically for Military Facilities has been excluded from this draft of the Tier System. The Federal Government currently owns these lands and there is no indication that these lands will change ownership in the near future.

#### 3.4.2 Tier Matrix

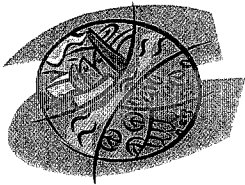
The following matrix was built by querying the attribute table. The residential and commercial areas were determined by using the Monroe County Property Appraiser's database and the property classification codes (PC) associated with each parcel.

Location (Mile Marker)	Tier	Vacant URM	Vacant IS	Vacant SR	Vacant Residential Parcels	Vacant Commercial Parcels	Total Private Vacant Parcels	Total Devel- oped Parcels
Lower Keys	I	3	616	202	2270	24	2294	445
MM 4-40	II	1	451	7	96	13	609	448
	III	173	1363	51	1596	194	1790	6175
<b>Total</b>		<b>177</b>	<b>2430</b>	<b>260</b>	<b>4462</b>	<b>231</b>	<b>3401</b>	<b>7068</b>

Source: Monroe County Tier Maps and Property Appraiser's Database

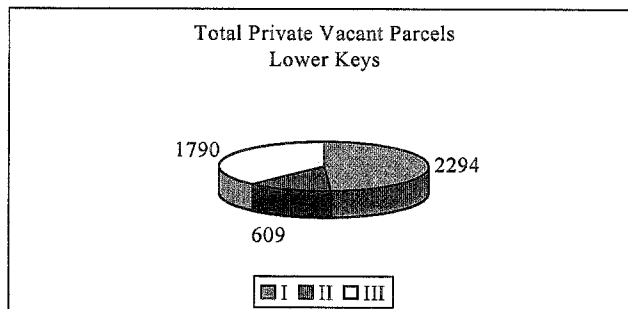
#### 3.4.3 Discussion

There are a total of 26,811 acres and 25,897 individual parcels within the Lower Keys Tier area. The total number of private vacant parcels is 3,401, 13% of all parcels in the area. The total number of developed parcels is 16,211 or 62.5% of the parcels in the Lower Keys. This number does not represent the area of total land developed. The number of publicly owned parcels is 6,910 or 26% of parcels, but the land mass that is occupied by publicly owned entities is 17,120 acres or 63.8% of the total area of the Lower Keys. The amount of area that is vacant and privately owned is 5,031 acres or 18.8% of the total area of the Lower Keys.



## THE TIER SYSTEM

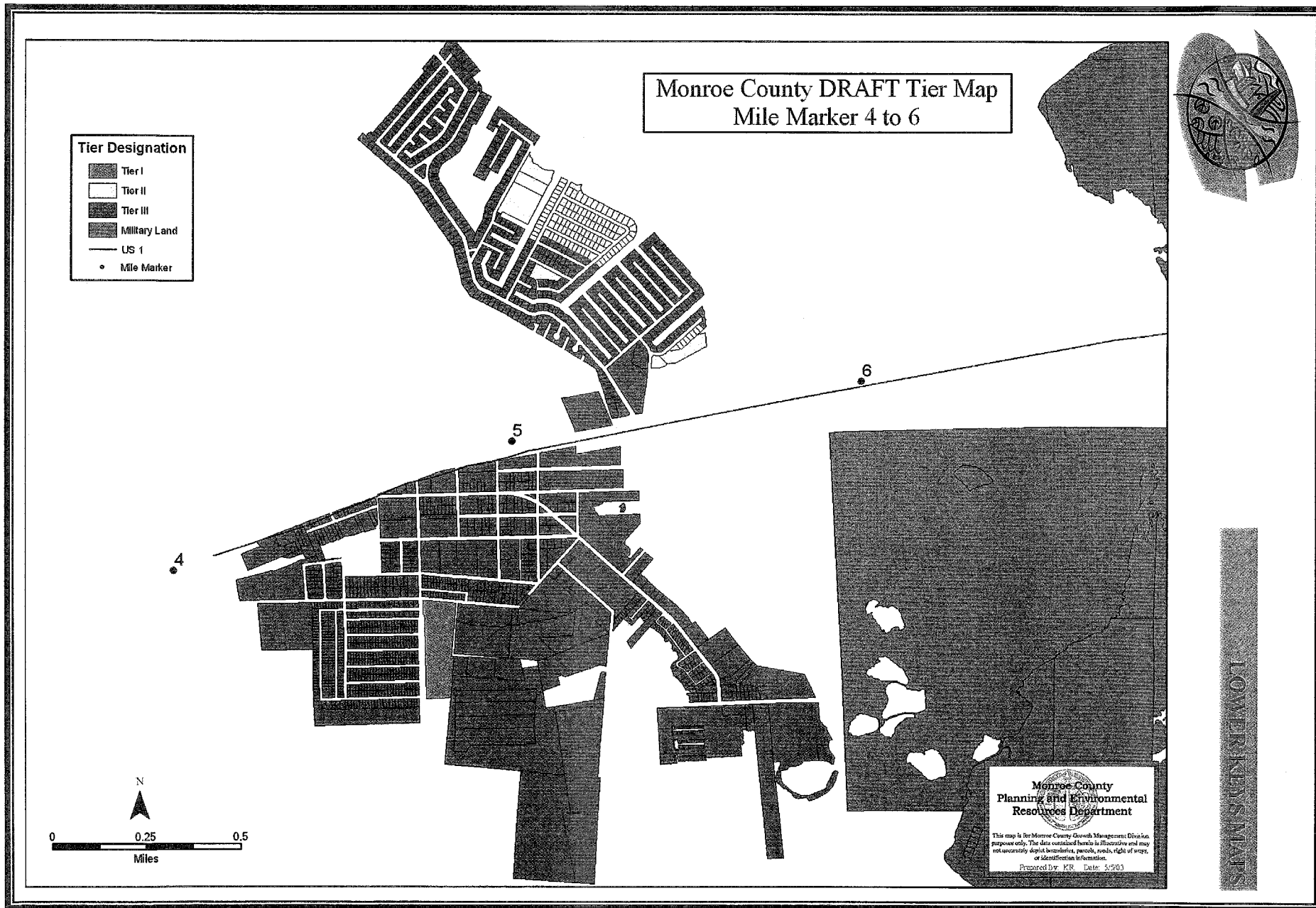
The following graph outlines the number of vacant private parcels in each tier in the Lower Keys.

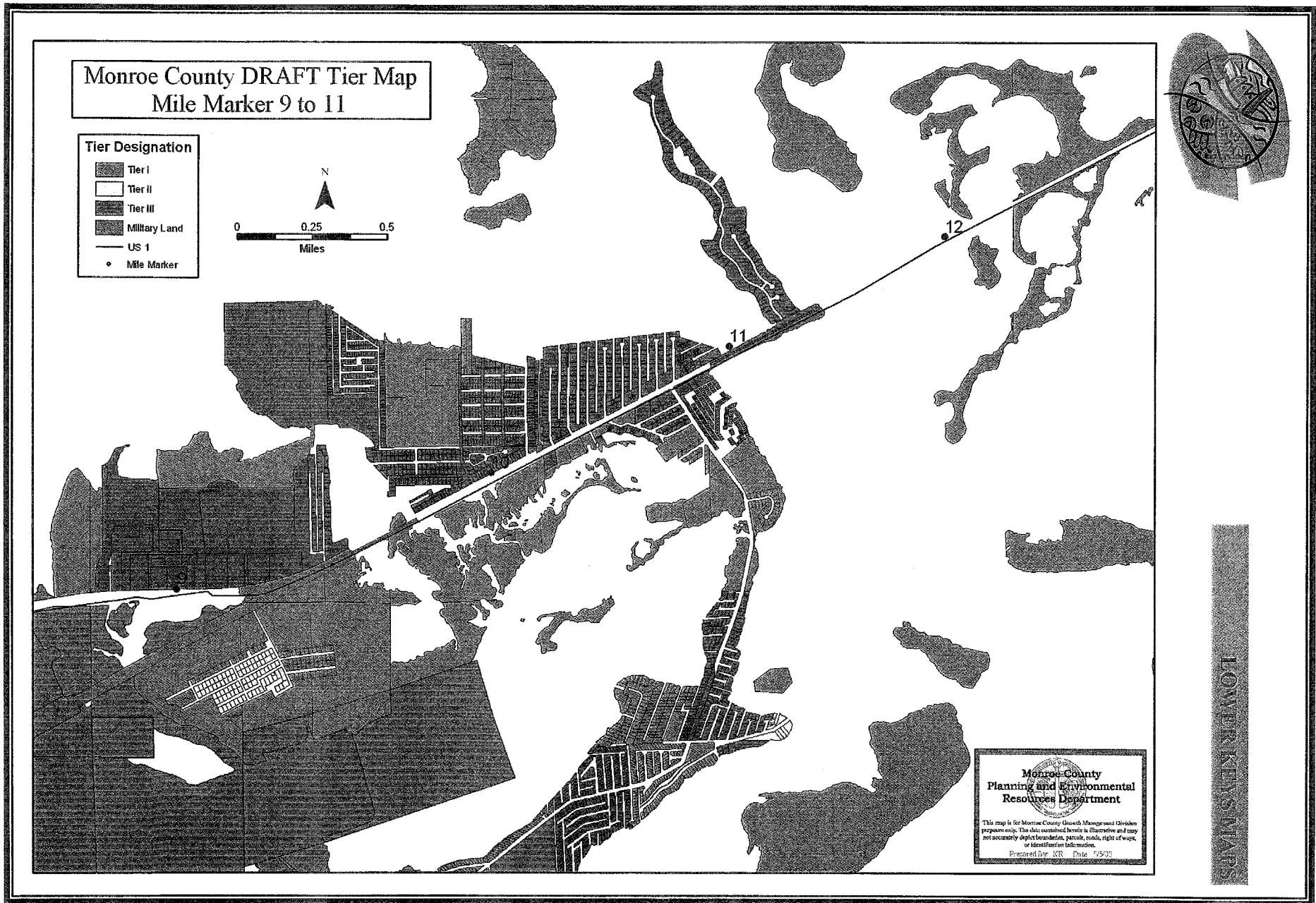


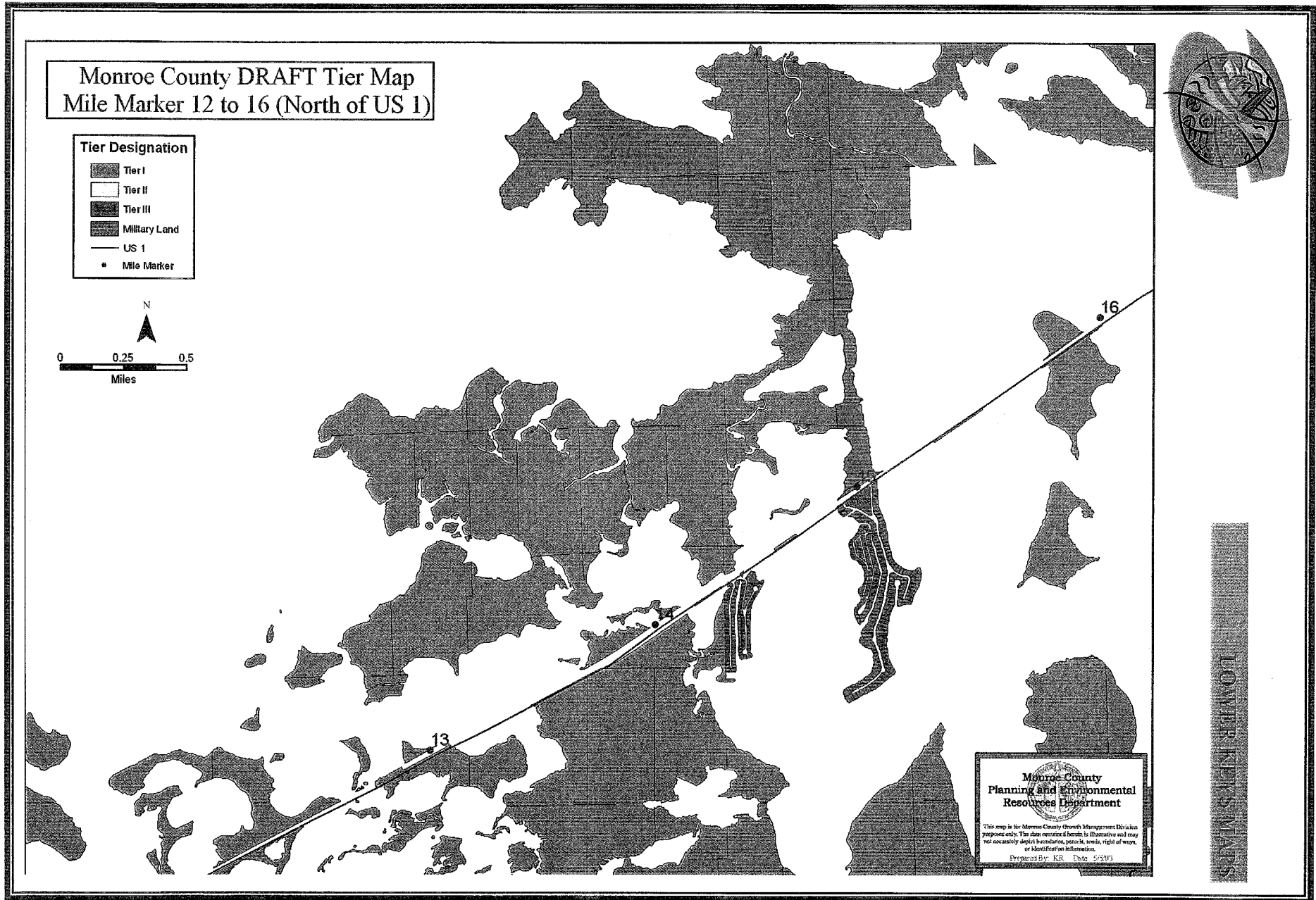
There are 2,294 vacant private parcels in the proposed Tier I areas, 609 vacant private parcels in the proposed Tier II areas and 1,790 vacant private parcels in the proposed Tier III areas.

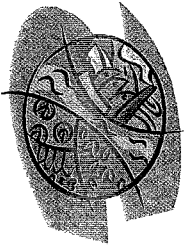
The number of Tier III vacant parcels includes both residential and commercial uses. The number of vacant IS and URM parcels in Tier I is 1,536. The density for these 1,536 parcels is one unit per lot. Therefore, there is the potential to develop 1,536 new single family dwelling units on the IS and URM lots. This is 85.8% of the total number of private vacant residential parcels. The remaining 14.2% of the total private vacant parcels is divided by the vacant commercial lots, which are only 8% of the total and other residential zoning classifications including Mixed Use (MU), Sparsely Settled (SS) and Suburban Residential (SR).

The total number of vacant commercial parcels is 231, with 194 or 84% of the parcels in Tier III. With the exception of Stock Island, the majority of the vacant commercial parcels are located on US 1 and are in close proximity to existing commercial uses.

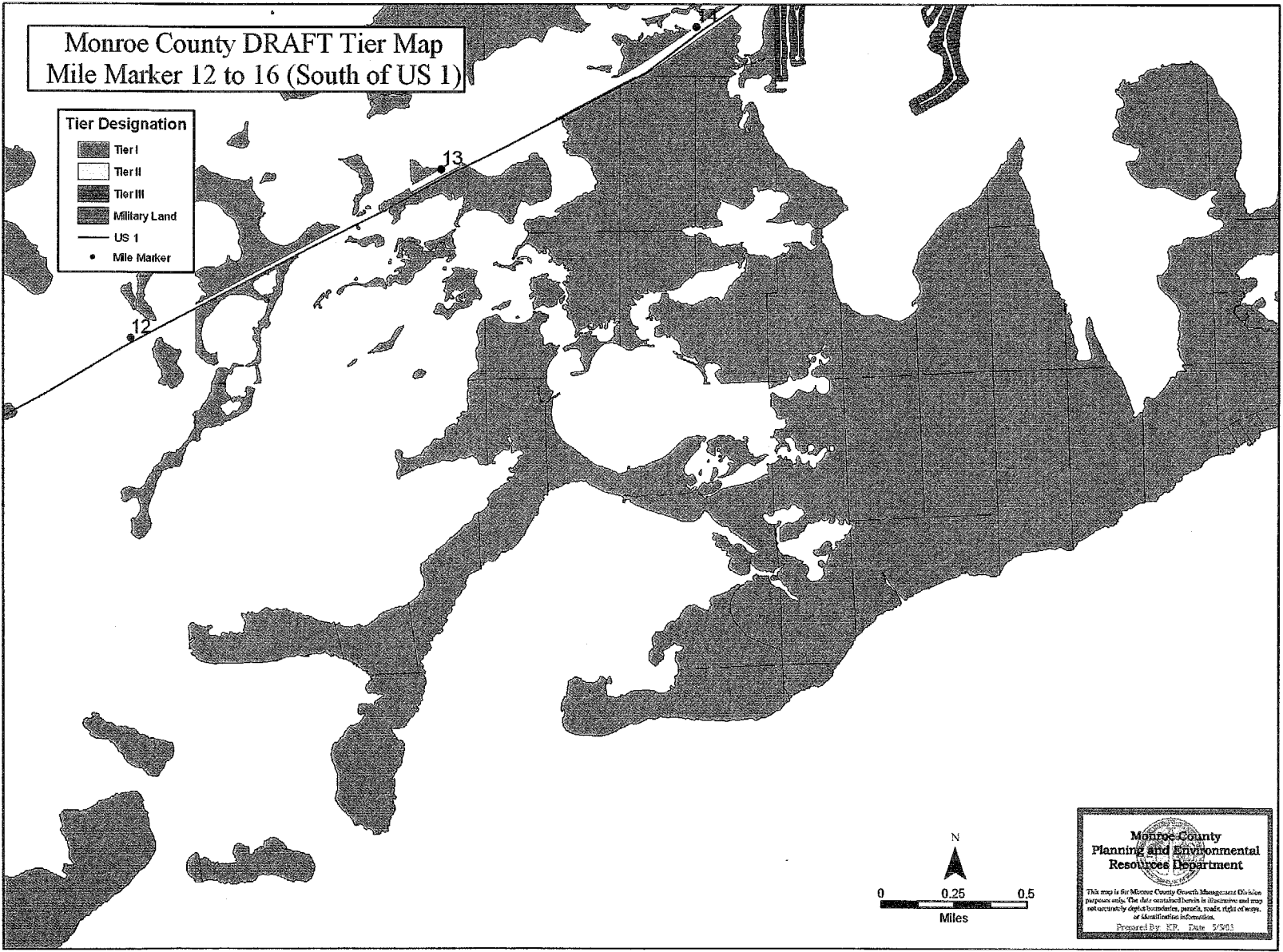








LOWERTIER MAPS







LOWER KEY MAPS

Monroe County  
Planning and Environmental  
Resources Department

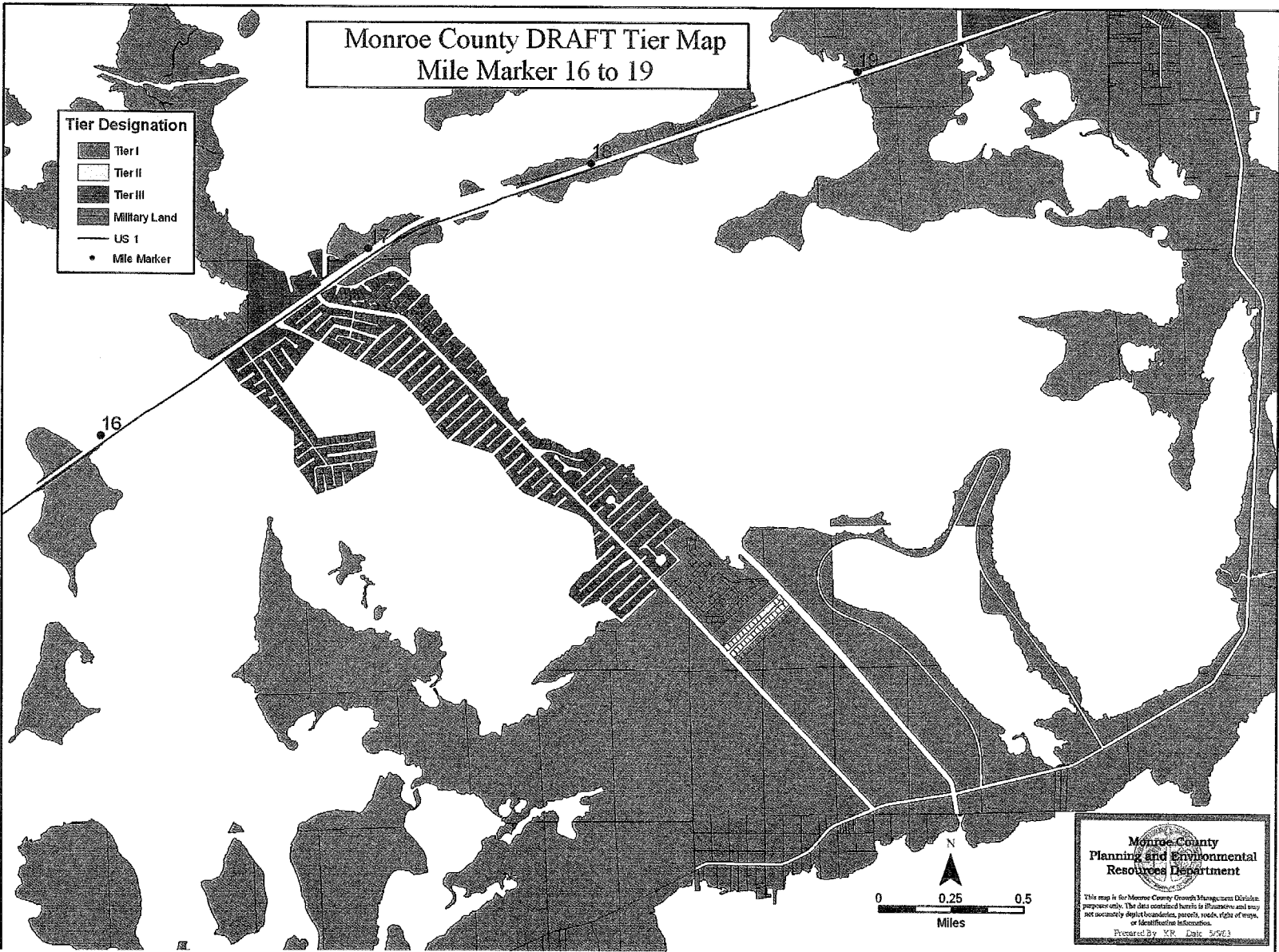
This map is for Monroe County Growth Management Division purposes only. The data contained herein is illustrative and may not accurately depict boundaries, parcels, roads, right of ways, or identification information.

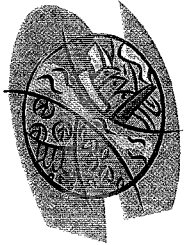
Prepared By: K.R. Date: 5/02



# Monroe County DRAFT Tier Map Mile Marker 16 to 19

- Tier Designation**
- Tier I
  - Tier II
  - Tier III
  - Military Land
  - US 1
  - Mile Marker



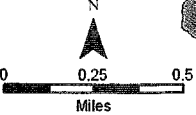
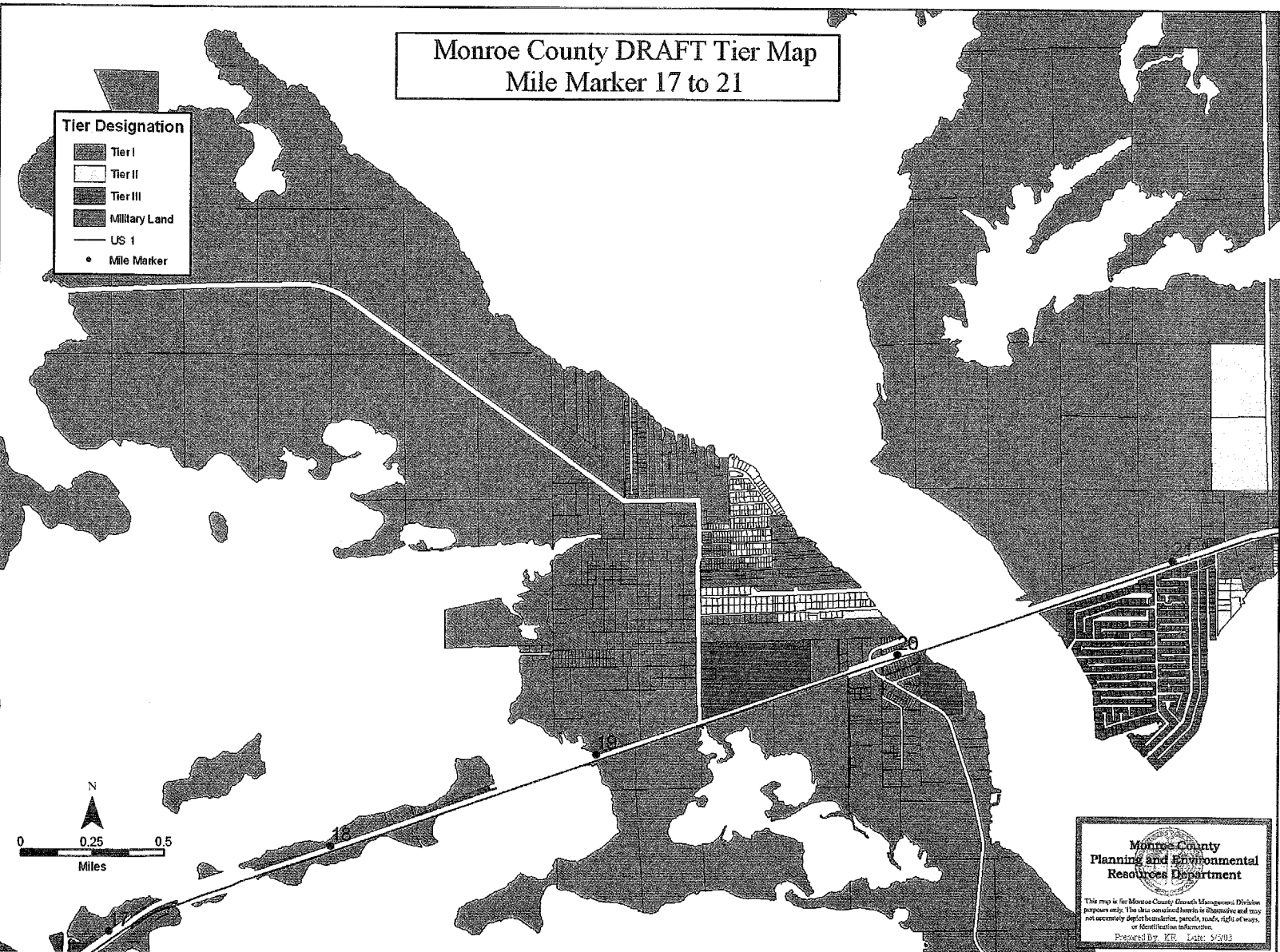


LOWER TIER MAPS

# Monroe County DRAFT Tier Map Mile Marker 17 to 21

**Tier Designation**

- Tier I
- Tier II
- Tier III
- Military Land
- US 1
- Mile Marker

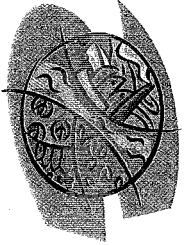


Monroe County  
Planning and Environmental  
Resources Department

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Prepared By: JTD Date: 4/2003



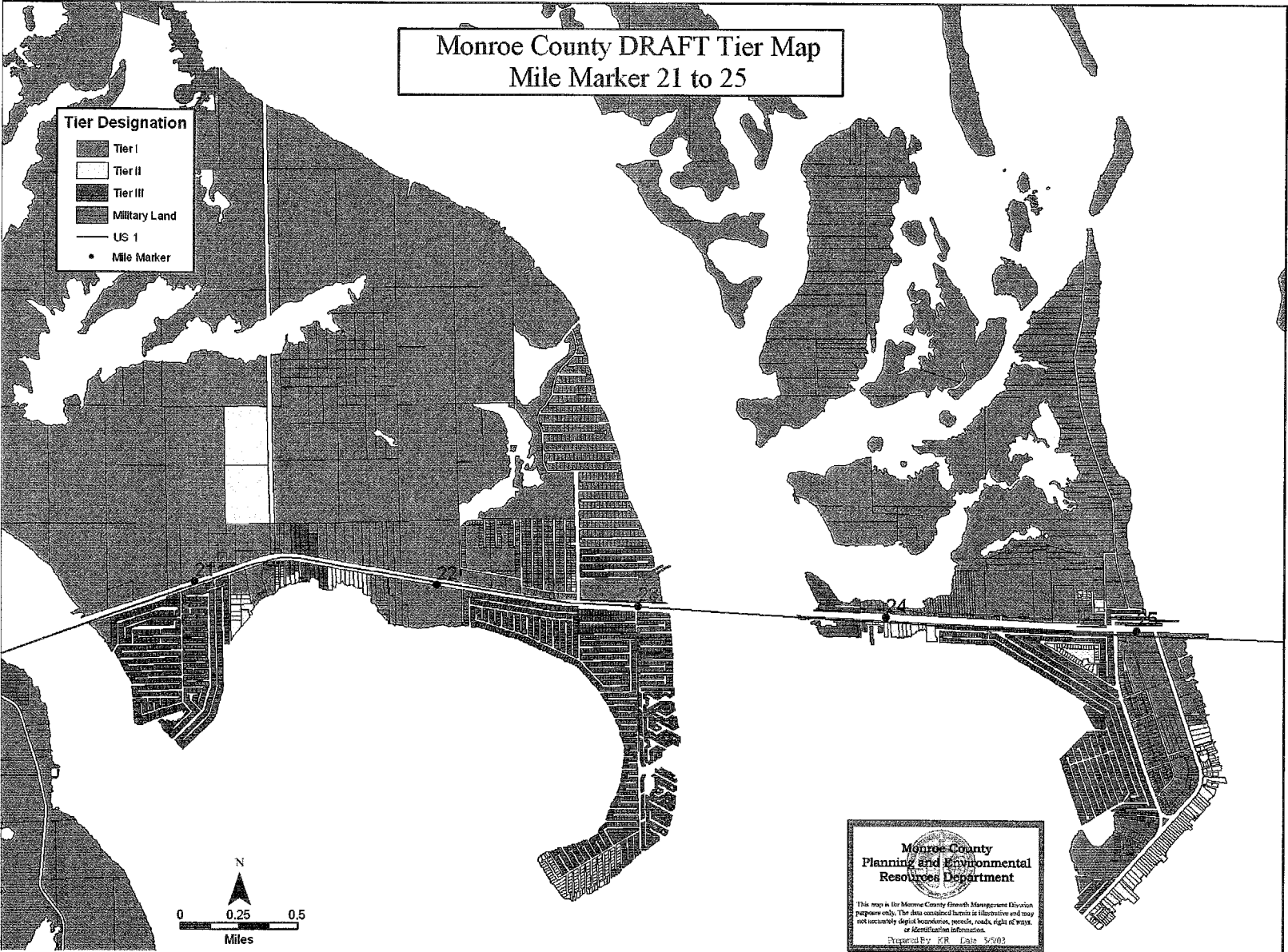


LOWER KEYS MAPS

# Monroe County DRAFT Tier Map Mile Marker 21 to 25

**Tier Designation**

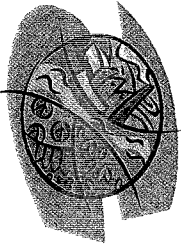
- Tier I
- Tier II
- Tier III
- Military Land
- US 1
- Mile Marker



Monroe County  
Planning and Environmental  
Resources Department

This map is for Monroe County Growth Management Division  
purposes only. The data contained herein is illustrative and may  
not accurately depict boundaries, parcels, roads, right of ways,  
or identification information.







Prepared By: KR Date: 5/5/03



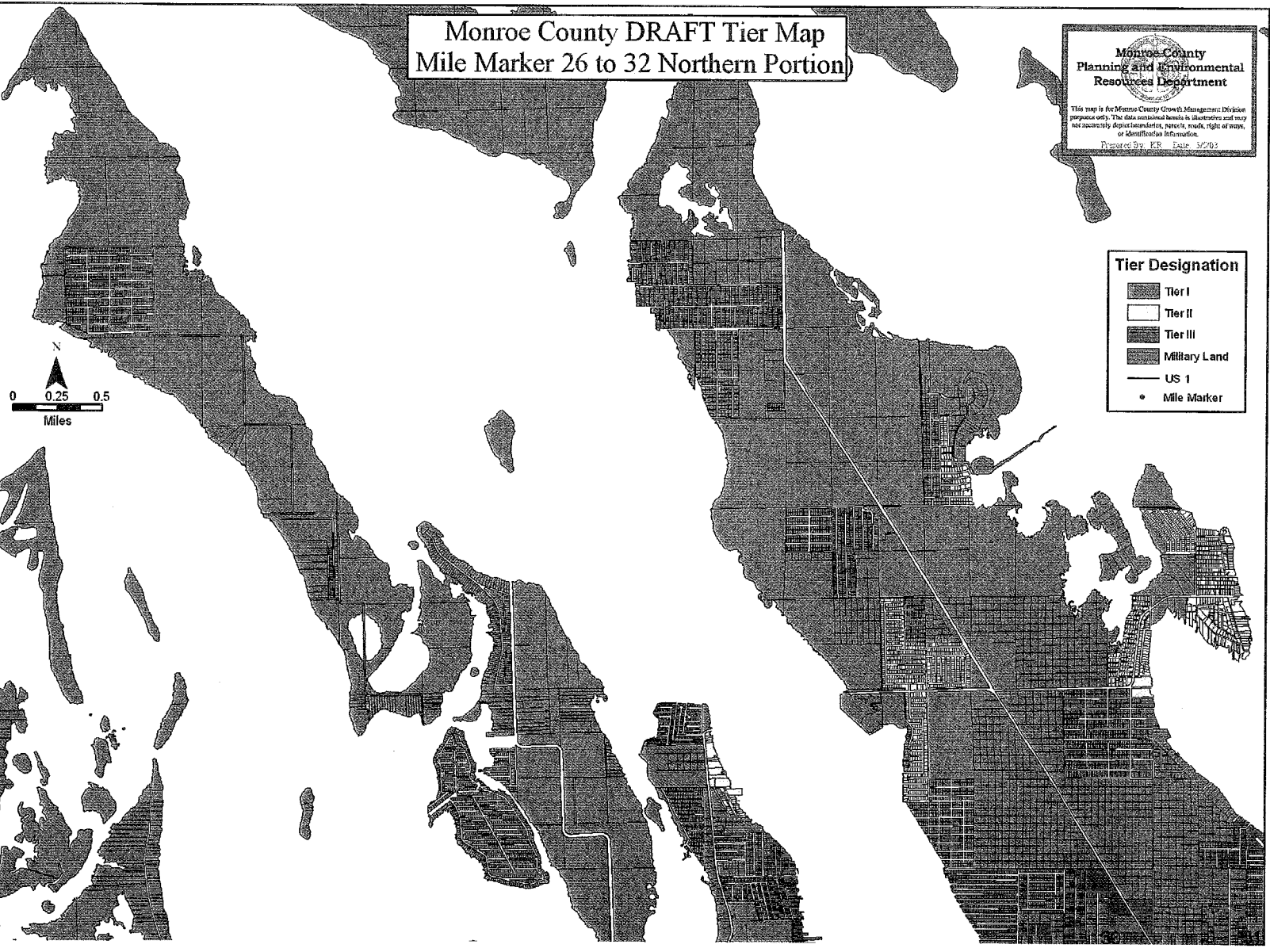
**Monroe County**  
**Planning and Environmental**  
**Resources Department**

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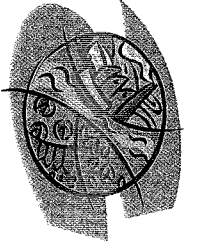
Prepared By: KR Date: 3/20/03

- Tier Designation**
-  Tier I
  -  Tier II
  -  Tier III
  -  Military Land
  -  US 1
  -  Mile Marker

**Monroe County DRAFT Tier Map**  
**Mile Marker 26 to 32 Northern Portion**

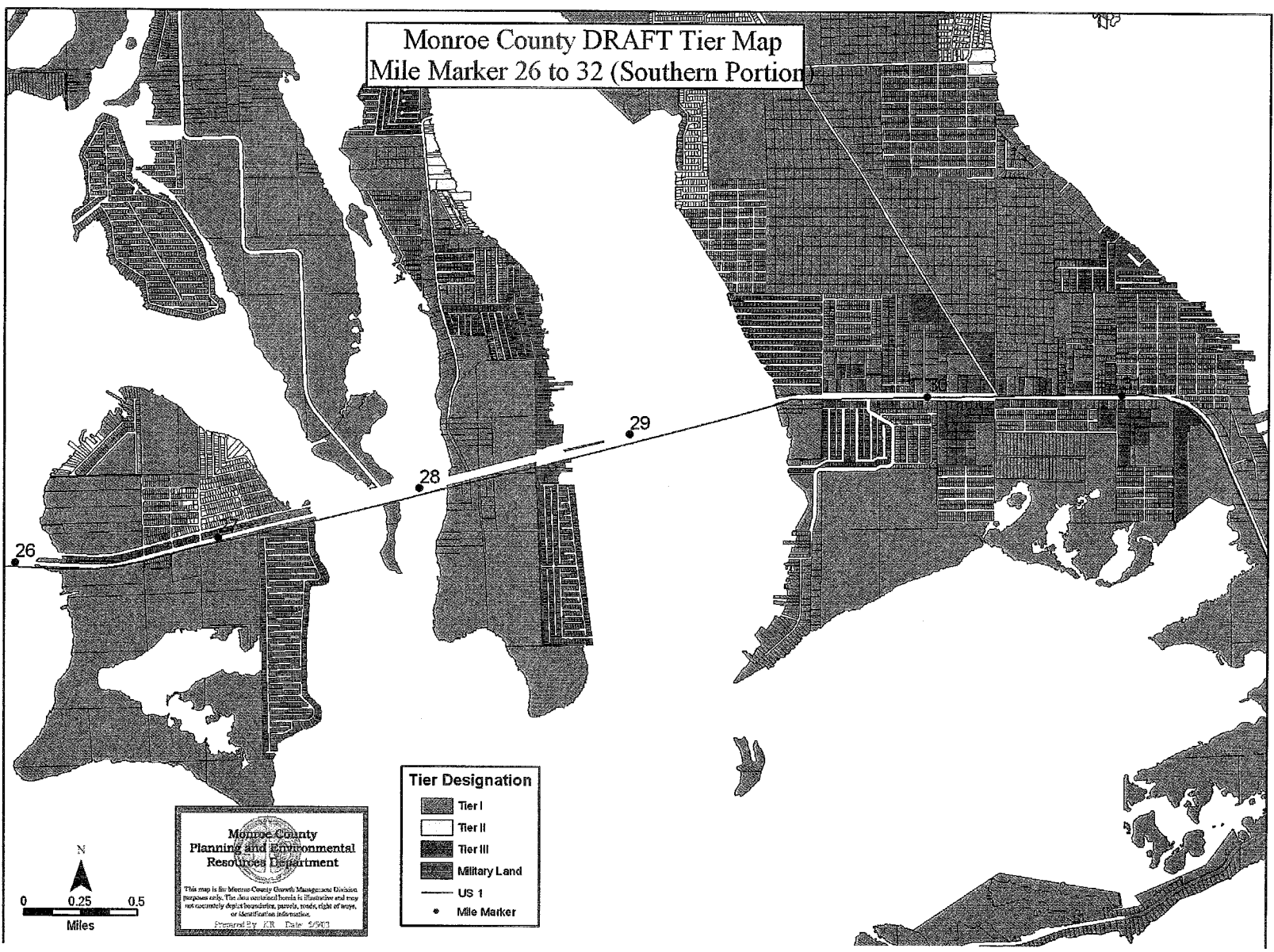


LOWER KANSAS MAPS



LOWE'S MAPS

# Monroe County DRAFT Tier Map Mile Marker 26 to 32 (Southern Portion)

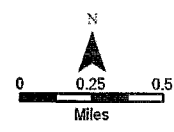


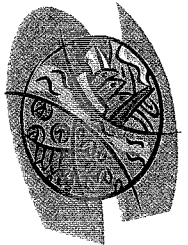
**Tier Designation**

- Tier I
- Tier II
- Tier III
- Military Land
- US 1
- Mile Marker

**Monroe County  
Planning and Environmental  
Resources Department**

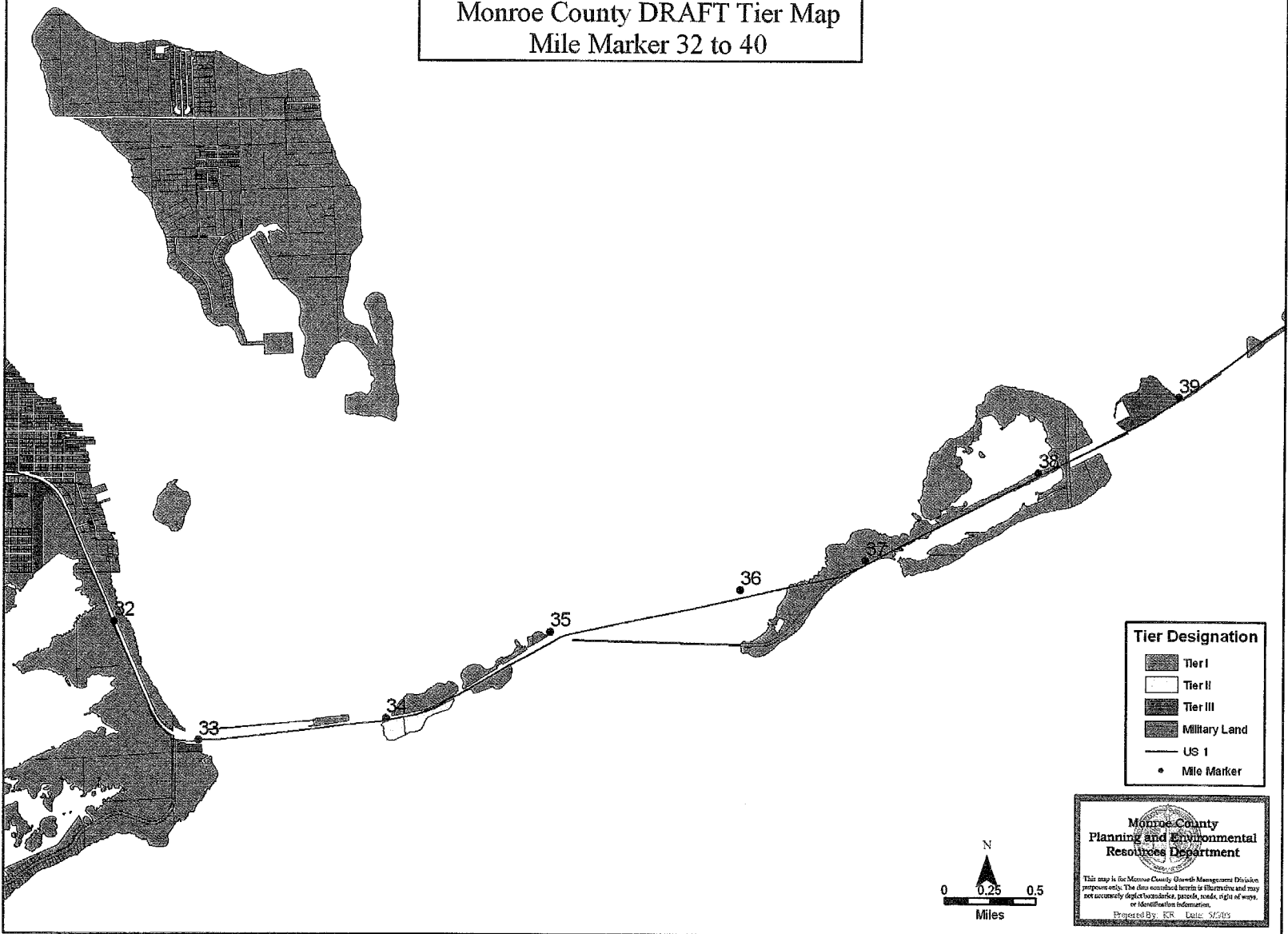
This map is for Monroe County Growth Management Division purposes only. The data contained herein is illustrative and may not accurately depict boundaries, parcels, roads, right of ways, or identification information.  
Prepared By: JLR Date: 5/9/01

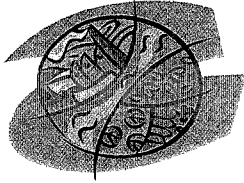




LOWER KEY'S MAPS

Monroe County DRAFT Tier Map  
Mile Marker 32 to 40





### 3.5 Big Pine Key and No Name Key

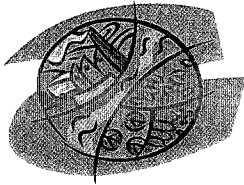
#### 3.5.1 Description

While Big Pine and No Name Keys are included in the Lower Keys, they require additional discussion and analysis. The Tier designations on Big Pine and No Name Key were not based on the criteria outlined in section 3.1 of this report, but rather other factors established by the Habitat Conservation Plan. The Habitat Conservation Plan (HCP) is required for a permit from U.S. Fish and Wildlife Service because any additional development on Big Pine will have an impact on the endangered species resulting in a prohibited 'taking' of the species. The HCP outlines what types of development will be permitted on Big Pine and No Name Keys and how the primary and secondary impacts of the new development on the endangered species (primarily the Florida Key Deer and the Lower Keys March Rabbit) will be mitigated.

The Tier designations on Big Pine and No Name Keys were based on a Key Deer Population Viability Analysis (PVA) model, in the HCP, which included different habitat characteristics relevant to the survival of the Key deer population. The factors used in the PVA (and also in determining Tier designations) were: deer corridors, deer density, house density, water barriers, distance from US 1, and habitat patch quality. These six factors were evaluated based on two forms of impact to the Key deer, secondary impacts such as increase in traffic and loss or change of habitat. Deer corridors, areas of high deer density, and areas with quality deer habitat were considered most valuable to the species, while areas with a high house density, water barriers such as canals, and areas close to US 1 were considered to be less valuable to the species.

The resulting Tier designations were somewhat different from other areas in the county. For example, subdivisions which are more than 50% built-out were not designated as Tier III because they are located in areas of high deer density, high habitat quality and located far from U.S. 1 thus increasing the likelihood of traffic mortality.





### 3.5.2 Tier Matrix

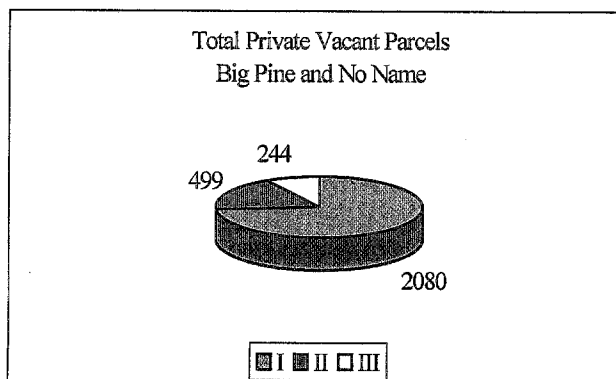
Location (Mile Marker)	Tier	Vacant URM	Vacant IS	Vacant SR	Vacant Residential Parcels	Vacant Commercial Parcels	Total Private Vacant Parcels	Total Devel- oped Parcels
Big Pine	I	9	865	102	2074	6	2080	1431
MM 29.5-33	II	0	487	0	499	0	499	784
	III	1	224	0	225	19	244	604
<b>Total</b>		<b>10</b>	<b>1576</b>	<b>102</b>	<b>2798</b>	<b>25</b>	<b>2823</b>	<b>2819</b>

Source: Monroe County Tier Maps and Property Appraiser's Database

### 3.5.3 Discussion

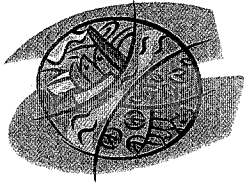
The majority of land on Big Pine and No Name is already under public ownership (roughly 67% including federal, state, and county lands). Most of the large tracts have already been purchased for conservation purposes and are under management by the US Fish and Wildlife Service and are part of the Key Deer Refuge and Great White Heron Sanctuary. The HCP will require any new development that occurs on Big Pine to be mitigated, mainly through the purchase of lands for conservation purposes. Therefore, the lands currently in private ownership designated Tier I is very important to mitigate the limited amount of proposed new development on Big Pine.

The following graph shows the breakdown of private, vacant parcels by their proposed Tier designations.



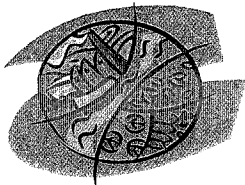
The majority of the vacant parcels located in Tier I are either acre parcels located in the center of Big Pine or small Improved Subdivision (IS) lots located in subdivisions which are located in deer corridors or on the north side of the island far from US 1. Tier III parcels are all located within close proximity to US 1 and the majority are IS lots located on canals, with a limited amount of vacant commercial lots within the US 1 Corridor. Tier II parcels are pre-

dominantly located in subdivisions in the central portion of Big Pine and are on canals or in areas of high housing density. All of No Name Key is designated Tier I.



## THE TIER SYSTEM

The Habitat Conservation Plan will determine the permitted amount of development activities on Big Pine and No Name Key for the next 20 years. The proposed plan will only permit 200 residential units (ten per year) and a corresponding amount of new commercial development. There are a total of 224 vacant IS lots proposed to be designated as Tier III, however there are 865 IS lots proposed as Tier I. Tier II, the transition area, has 487 vacant IS lots.



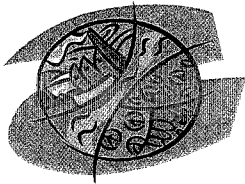
## 4.0 Recommendations

- The Planning Commission to recommend the Tier Maps to the Board of County Commissions for adoption as guidance maps for acquisition of lands from willing sellers and to designate Tier I as "Conservation Land Protection Area" permitting donation of lots for ROGO points.
- Staff to continue to refine the maps, final Tier Maps to be adopted as an over-lay to the zoning maps as required in the 2010 Plan.
- Staff and the Planning Commission to work together to develop revised ROGO and development regulations to incorporate the Tiers and fulfill the requirements of the Work Program in the Comprehensive Plan.
- Contract to have a fiscal analysis performed on the impact of using the maps as a basis for acquisition and future rate of growth regulations.
- Analyze the Tiers and revisions to the LDRs in the "Carrying Capacity Impact Assessment Model" to determine the improvements in projected Carrying Capacity with the amendments.

Vacant Parcels and Development Potential															
Location	Tier	Va- cant URM	Va- cant IS	Va- cant SR	Vacant SR Acres	Vacant SS & NA Acres	Vacant Residen- tial Parcels	Vacant Commer- cial Parcels	Vacant Residen- tial Acres	Vacant Commer- cial Acres	Total Private Vacant Acres	Total Private Vacant Parcels	Public Acres	Total Acres	Total Develop- ed Parcels
<b>Upper Keys</b>															
	I	26	680	416	224	1203	1595	75	860	217	1077	1670	12812	25895	542
	II	0	1064	44	50	9	1112	57	188	20	208	1169	18	534	1132
	III	264	1358	28	14	3	1645	465	254	100	354	2110	97	2339	8099
<i>Upper Keys Subtotal</i>		290	3102	488	288	1215	4352	597	1302	337	1639	4949	12927	28768	9773
<b>Middle Keys</b>															
	I	0	8	1	20	90	32	0	117	0	130	32	804	954	10
	II	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	III	61	384	0	0	0	444	9	96	7	103	453	6	372	1084
<i>Middle Keys Subtotal</i>		61	392	1	20	90	476	9	213	7	233	485	810	1326	1094
<b>Big Pine and No Name</b>															
	I	9	865	102	100	677	2074	6	910	2	912	2080	4896	6716	1431
	II	0	487	0	0	2	499	0	87	0	87	499	10	271	784
	III	1	224	0	0	0	225	19	38	13	51	244	22	298	604
<i>Subtotal</i>		10	1576	102	100	679	2798	25	1035	15	1050	2823	4928	7285	2819
<b>Lower Keys (excluding BPK &amp; NNK)</b>															
	I	3	616	202	201	4119	2270	24	4295	71	4366	2294	16939	24100	445
	II	1	451	7	4	33	596	13	129	5	134	609	18	371	448
	III	173	1363	51	25	7	1596	194	304	227	531	1790	163	2340	6175
<i>Subtotal</i>		177	2430	260	230	4159	4462	231	4728	303	5031	4693	17120	26811	7068
<i>Lower Keys Subtotal</i>		187	4006	362	330	4838	7260	256	5763	318	6081	7516	22048	34096	9887
<b>County Total</b>		477	7108	850	618	6053	11612	853	7065	655	7720	12465	34975	62864	19660



Attachment A



*From the Monroe County Year 2010 Comprehensive Plan*

**WORK PROGRAM**

**YEAR ONE (ending December 31, 1997)**

- A. Complete Phase I (data collection) for the Wastewater and Stormwater Master Plans, and secure funding for plan completion. (Reference County Objective. 901.4)

Agencies; County, DCA DEP, HRS and SFWMD.

- B. Complete a conceptual plan or scope of work to develop a carrying capacity. The carrying capacity analysis shall be designed to determine the ability of the Florida Keys ecosystem, and the various segments thereof, to withstand all impacts of additional land development activities. The analysis shall be based upon the findings adopted by the Administration Commission on December 12, 1995, or more recent data that may become available in the course of the study, and shall be based upon benchmark of, and all adverse impacts to the Keys land and water natural systems, in addition to the impact of nutrients on marine resources. The carrying capacity analysis shall consider aesthetic, socioeconomic (including sustainable tourism), quality of life and community character issues, including the concentration of population, the amount of open space, diversity of habitats, and species richness. The analysis shall reflect the interconnected nature of the Florida Keys' natural systems, but may consider and analyze the carrying capacity of specific islands or groups of islands and specific ecosystems of habitats, including distinct parts of the Keys' marine system. (Ref. 1991 Stip. Settlement Agreement)

Agencies: County, DCA, DEP, HRS, DOT, GFC, SFWMD, NMS, SFRPC, EPA, USFW, Army COE, and other interested parties to include representatives of environmental organizations and development interests.

- C. Complete AWT/OSDS demonstration study and initiate rulemaking for new standards for OSDS. (Reference County Policy 901.4.3).

Agencies: HRS.

- D. Complete Marathon Facilities Plan and secure funding for the facility site(s). The wastewater facilities plan should implement the most cost effective method of collecting, treating, and disposing of wastewater and shall include an investigation of the feasibility of using alternative nutrient-stripping on-site disposal systems. The development of the facilities plan shall be a component of the wastewater Master Plan as that Plan is developed.

Agencies: County, DCA, and DEP.

- E. Continue cesspit elimination program with identification of Hot Spots as first priority in accordance with Objective 901.2 and seek funding for cesspit identification. Enter into an interlocal agreement with HRS to specify the responsibilities and procedures for the OSDS inspection/compliance program as required by Policy 901.2.3. Adopt an ordinance which specifies the implementation procedures for the OSDS inspection/compliance program. The ordinance shall include authorization for HRS to inspect wastewater treatment systems on private property as required by Policy 901.2.3. (Reference County Objective 901.2).

Agencies: County, DCA, and HRS.

- F. Submit status of CARL and ROGO land acquisition to the Administration Commission.

Agencies: County, Land Authority, and DEP.

- G. Revise the habitat Evaluation Index (HEI) based on peer review.

Agencies: County, DCA, DEP, FGFWFC, and Federal agencies.



**YEAR TWO (ending December 31, 1998)**

- A. Complete the wastewater and Stormwater Master Plans and execute interagency agreements to define construction schedule by phases. Document that significant reduction in nutrients will be achieved each year thereafter within each sub-areas. The Master Plans shall include facility plans for all proposed treatment strategies, and determine retrofit and funding requirements for HOT Spots and cesspit identified in D below.

Agencies: County, DCA, DEP, and HRS.

- B. Secure funding for the carrying capacity study and initiate Phase I (data collection) of the study.

Agencies: County, DCA, and DEP.

- C. Complete cesspit ID process in Hot Spots, excluding the Marathon area.

Agencies: County, DCA, and HRS.

- D. Submit status of CARL and ROGO land acquisition to the Administration Commission.

Agencies County, Land Authority, and DEP.

- E. Document the extent and quality of the fresh groundwater lens system on Big Pine Key; delineate the associated recharge areas; and determine the safe yield of the system. (Reference County Policy 103.1.5).

Agencies: County, DCA, SFWMD, USFWS

**YEAR THREE (January 1, 1999 through July 12, 2000)**

- A. Complete and begin implementation of Wastewater Master Plan. Utilizing the findings of the Wastewater Master Plan and recommendations of the Water Quality Steering Committee relating to Hot Spots do the following: refine and prioritize areas identified as Hot Spots, determine retrofit and funding requirements for priority Hot Spots and cesspit replacement for areas outside those areas identified for central or cluster wastewater collection systems, and begin developing facility plans for priority Hot Spots. Execute interagency agreements to define facility plan, design and construction schedules for each Hot Spot facility. Establish a water quality monitoring program to document the reduction in nutrients as a result of these facilities. Complete a wastewater treatment finance plan and a service area implementation plan, and continue efforts to secure funding for Wastewater Master Plan implementation, with priority given to Hot Spots. Determine the feasibility and legal ramifications of establishing an escrow account as a means of providing long-term funding for replacing cesspits or substandard onsite sewage systems. Establish a mechanism such as special assessments, impact fees, infrastructure surcharge, or other dedicated revenues, to fund the local share of wastewater improvements in Years Four and Five. Seek to provide comparable subsidies for both wastewater collection systems and individual cesspit replacement.

Agencies: County, FKAA, DCA, DEP, DOH, SFWMD, EPA and Water Quality Protection Program Steering Committee (WQSC).

- B. Secure funding for Storm Water Master Plan development, contract selected firm for development of Master Plan, and complete Phase I (data collection). Determine the feasibility of providing nutrient reduction credits for stormwater improvements.

Agencies: County, DCA, DOT, SFWMD, EPA and WQSC.

- C. Conclude acquisition of North Key Largo Hammocks CARL project. Make offers to 33% of remaining private owners with property located in other CARL project boundaries.

Agencies: County, Land Authority and DEP.

- D. Secure remaining funds for the carrying capacity study, conduct workshops as outlined in the Scope of Work, select prime contractor, and initiate Phase I (data collection) of the study.

Agencies: County, DCA, DEP, DOH, DOT, FFWCC, SFWMD, WQSC, SFRPC, EPA, USFWS, Army COE, and other interested parties to include representatives of environmental organizations and development interests.

- E. Continue efforts to secure funding for the Marathon Facility. Complete Little Venice construc-

tion design, secure lands needed for Little Venice facility, and begin bid process and selection of construction firm. Design a water quality monitoring program to document Little Venice project impacts.

Agencies: County, FCAA, DCA, DEP, WQSC, and EPA.

- F. Continue cesspit identification by providing notice to all property owners with unknown systems, outside of Hot Spots. Initiate replacement of cesspits outside of Hot Spots. Award financial assistance grants to qualified applicants using FY 1997-98 state funds to ensure a minimum of 70 cesspit replacements. Develop a low interest loan and grant program to assist all residents in replacing cesspits, with priority of funds going, in order of preference, to very low-, low- and moderate-income households. Investigate the appropriate point at which nutrient reduction credits can be awarded for future committed water quality treatment facilities and the appropriateness of transferring credits among ROGO areas.

Agencies: County, DCA, FCAA, WQSC and DOH.

- G. Document the extent and quality of the fresh groundwater lens system on Big Pine Key; delineate the associated recharge areas; and determine the safe yield of the system. (Ref. County pol. 103.1.5)

Agencies: County, FCAA, DEP, DCA, SFWMD, EPA, WQSC and USFWS.

- H. Develop an integrated funding plan for the purchase of land from ROGO applicants who have competed unsuccessfully for four consecutive years and applied for administrative relief.

Agencies: County.

- I. The County, in conjunction with DCA, shall assess the feasibility of applying the nutrient reduction credit requirement to new commercial development.

Agencies: County and DCA.

#### **YEAR FOUR (July 13, 2000 through July 12, 2001)**

- A. Continue implementation of Wastewater Master Plan, execute interagency agreements to define construction schedule by phases, and continue developing facility plans for priority Hot Spots in each ROGO area. Secure funding to implement the Wastewater Master Plan. Document that reduction in nutrients has been achieved within each of the sub-areas.

Agencies: County, FCAA, DCA, DEP, DOH, EPA and WQSC.

- B. Complete Storm Water Master Plan. Identify priority projects for implementation and seek funding for plan implementation.

Agencies: County, DCA, DEP, DOT, SFWMD, EPA and WQSC.

- C. Make offers to 50% of remaining private owners with property located in CARL project boundaries.

Agencies: County, Land Authority and DEP.

- D. Complete Phase II of the carrying capacity study (data analysis) and present initial recommendations to review agencies.

Agencies: County, DCA, DEP, DOH, DOT, FFWCC, SFWMD, WQSC, SFRPC, EPA, USFWS, Army COE, and other interested parties to include representatives of environmental organizations and development interests.

- E. Establish baseline water quality for surface and groundwater quality potentially impacted by Little Venice project.

Agencies: County, DCA, DEP, FCAA, WQSC and EPA.

- F. Complete cesspit identification and continue cesspit replacement outside of Hot Spots, with a priority of funds going, in order of preference, to low- and moderate income households; ensure that a minimum of 88 cesspits are replaced

Agencies: County, FCAA, WQSC and DOH.